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Unusual Features in the Lumbar Plexus of the Opossum

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In the course of making a detailed study of the lumbar and sacral plexuses of the opossum, *Didelphis virginiana*, it was found that certain nerves of the lumbar plexus were unusual as to number and relationships. The nerves which are especially noteworthy and which are the substance of this report are the genitofemoral and the ones numbered 1, 2 and 3 in Figure 1. These latter correspond to the iliohypogastric and the ilioinguinal since their branches

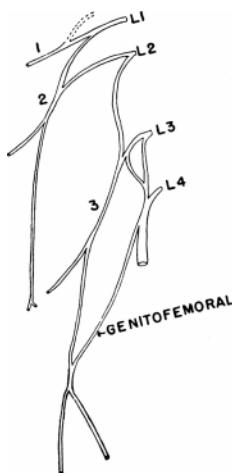


Figure 1. Portion of the lumbar plexus showing union of the genitofemoral nerve with branch of nerve 3, as found in the female; and the numbers and origin of nerves the equivalent of the iliohypogastric and the ilioinguinal.

are distributed to the regions supplied by those nerves in the human body, the domestic cat, and the albino rat. They are different from those nerves in man and the rat in that there are more of them and they are formed from

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the first, second and third lumbar nerves, with a small communication sometimes from the last thoracic nerve. In the cat the same lumbar nerves are involved and there are apparently as many nerves but the formation of them is not alike.

The genitofemoral nerve presents differences in its origin, it being from lumbar nerves 3 and 4, and in its formation in the psoas minor muscle (the "large" psoas in the opossum) from which it emerges and passes caudally on this muscle's ventral surface.

Of particular interest is a sex difference noted in the branch (from nerve 3) which is distributed to the inguinal region, and the genitofemoral nerve. In the female opossum the genitofemoral nerve, as it passes rearward to enter the body wall, inosculates with this posterior branch of nerve 3. It does not do this in the male but remains apart. Apparently such a condition is not known to occur in any other mammal. In this study detailed dissections were made of the lumbosacral plexus of three females and three males.

Several other specimens were examined in checking on these and other features, although complete dissections were not made.

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